

**Louisiana Department of Environmental Quality (LDEQ)  
Office of Environmental Services**

**STATEMENT OF BASIS**

**Cameron LNG LLC  
Part 70 Permit Modification  
Cameron LNG LLC - Cameron LNG Facility  
Hackberry, Cameron Parish, Louisiana  
Agency Interest Number: 99407  
Activity Number: PER20060002  
Proposed Permit Number: 0560-00184-V3**

**I. APPLICANT**

**Company:**

Cameron LNG LLC - Cameron LNG Facility  
P.O. Box 349  
Hackberry, Louisiana 70645-0349

**Facility:**

Cameron LNG LLC  
301 N Main Street  
Hackberry, Cameron Parish, Louisiana

**II. FACILITY AND CURRENT PERMIT STATUS**

Cameron LNG LLC, a wholly owned subsidiary of Sempra Energy International, is expanding the Cameron LNG Facility for the unloading of LNG. The facility is located at 301 North Main Street, Hackberry, Cameron Parish.

The Cameron LNG Facility received its initial Part 70 Operating Permit No. 0560-00184-V0 on October 6, 2003. Due to design changes during construction, Permit No. 0560-00184-V1 was issued on October 3, 2005 and Permit No. 0560-00184-V2 was issued on June 28, 2006. The current permit is 0560-00184-V2, dated June 28, 2006.

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### **III. PROPOSED PROJECT/PERMIT INFORMATION**

#### **Application**

A permit application and Emission Inventory Questionnaire were submitted by Cameron LNG LLC on July 26, 2006 requesting a Part 70 operating permit modification. Additional information dated August 27, 2007 was also received.

#### **Project**

The Cameron LNG Facility will import, store, and vaporize liquefied natural gas (LNG) for supply to the U.S. natural gas markets.

LNG will be received from marine tankers that will berth at the terminal's unloading dock. LNG will be transferred from the marine vessels into low pressure tanks for storage, then regasified using submerged combustion vaporizers. The vaporized natural gas will be measured and sent to transmission pipelines. Any natural gas that exceeds the interstate Btu content limits will be processed in a natural gas liquids recovery unit to remove a portion of the higher Btu components to meet specifications.

With this modification for an expansion, Cameron LNG proposes to add eight additional Submerged Combustion Vaporizers, two hot water heaters, three emergency diesel fire water pumps, two emergency river water pumps, and two emergency diesel generators. An additional LNG storage tank will be added as well.

With this expansion, the facility will be able to vaporize 2.65 billion standard cubic feet per day of liquefied natural gas (LNG).

Cameron LNG is an existing minor source with respect to the Prevention of Significant Deterioration Program (PSD) due to the determination the submerged combustion vaporizers are not fossil fuel boilers. Because the expansion project does not constitute a major source in and of itself, PSD does not apply.

#### **Proposed Permit**

Permit 0560-00184-V3 will be the Part 70 operating permit modification for the Cameron LNG Facility.

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**Permitted Air Emissions**

Estimated emissions in tons per year are as follows:

Pollutant	Before	After	Change
PM <sub>10</sub>	34.57	72.68	+38.11
SO <sub>2</sub>	2.80	13.56	+10.76
NO <sub>x</sub>	237.74	477.18	+239.44
CO	185.16	335.77	+150.61
VOC *	25.17	52.81	+27.64

**IV REGULATORY ANALYSIS**

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

**Applicability and Exemptions of Selected Subject Items**

ID No.	Requirement	Note
Entire Facility	Comprehensive Toxic Air Pollutant Emission Control Program [LAC 33:III.Chapter 51]	DOES NOT APPLY. Cameron LNG is not a major source of toxic air pollutants.
	40 CFR 68 Chemical Accident Prevention	DOES NOT APPLY. The provisions of Section 112(r) do not apply to storage incidents due to transportation.
	LAC 33:III.Chapter 59 Chemical Accident Prevention Program	DOES NOT APPLY. The provisions of this chapter do not apply to storage incidents due to transportation.

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<p>EU01A-EU01R: Submerged Combustion Vaporizers</p> <p>EU02A-EU02C: Hot Oil Heaters</p> <p>EU05A- EU05B: Emergency Generators</p> <p>EU11A-EU11C: Emergency Fire Water Pumps</p> <p>EU12A- EU12B: Emergency River Water Pumps</p>	<p>Emission Standards for Sulfur Dioxide Recordkeeping and Reporting [LAC 33:III.1503]</p>	<p>EXEMPT. Units emit less than 250 tons of SO<sub>2</sub> per year. Record and retain at the site for at least 2 years the data required to demonstrate compliance with or exemption from SO<sub>2</sub> standards of Chapter 15. Compliance data shall be reported annually in accordance with LAC 33:III.918.</p>
<p>EU05A- EU05B: Emergency Generators</p> <p>EU11A- EU11C: Emergency Fire Water Pumps</p> <p>EU12A- EU12B: Emergency River Water Pumps</p>	<p>Emission Standards for Particulate Matter [LAC 33:III.1313]</p>	<p>DOES NOT APPLY. Primary purpose is not indirect heating.</p>

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EU01A – EU01R: Submerged Combustion Vaporizers	Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units [40 CFR 60, Subpart Db]	DOES NOT APPLY. The submerged combustion vaporizers are not fossil fuel steam generating units as defined under 40 CFR 60.41(b).
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**Prevention of Significant Deterioration/Nonattainment Review**

Not Required. This expansion project is below the 250 tpy threshold for Prevention of Significant Deterioration (PSD) due to the determination that the submerged combustion vaporizers are not considered fossil fuel boilers.

**Streamlined Equipment Leak Monitoring Program**

Not Required.

**MACT Requirements**

The Cameron LNG Facility will not be a major source of LAC 33:III.Chapter 51 regulated toxic air pollutants (TAPs).

**Air Quality Analysis**

Not Required.

**General Condition XVII Activities**

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

**Insignificant Activities**

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

**V. PERMIT SHIELD**

Not requested.

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## **VI. PERIODIC MONITORING**

Compliance Assurance Monitoring (40 CFR 64) does not apply, since the major source units do not have the potential to emit greater than 100 tons of a regulated air pollutant before controls.

## **VII. GLOSSARY**

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Hydrogen Sulfide (H<sub>2</sub>S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

Liquefied Natural Gas (LNG) – An odorless, non-toxic and non-corrosive liquid form of natural gas. Natural gas is converted to LNG by cooling it to -260° F, at which point it becomes a liquid.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C (“Prevention of Significant Deterioration of Air Quality”) and D (“Nonattainment New Source Review”).

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Nitrogen Oxides (NO<sub>x</sub>) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH<sub>4</sub>), Ethane (C<sub>2</sub>H<sub>6</sub>), Carbon Disulfide (CS<sub>2</sub>)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per

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year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM<sub>10</sub> – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO<sub>2</sub>) – An oxide of sulfur.

Sulfuric Acid (H<sub>2</sub>SO<sub>4</sub>) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – Sec Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.